## **PATENT COOPERATION TREATY**

From the INTERNATIONAL SEARCHING AUTHORITY				REC'D 1 2 AUG 2005	
To:			AP	P	
				WIPO PCT	
	one form DCT/CA DOO	·	WRITTEN OPINION OF THE		
	see form PCT/ISA/220			NAL SEARCHING AUTHORITY	
		·	(I	PCT Rule 43 <i>bis</i> .1)	
			Date of mailing		
	·		(day/month/year) se	e form PCT/ISA/210 (second sheet)	
Applicant's or agent's file reference see form PCT/ISA/220			FOR FURTHER ACTION See paragraph 2 below		
	mational application No. T/EP2004/012593	International filing date (c	day/month/year)	Priority date (day/month/year) 08.01.2004	
	mational Patent Classification (IPC) or I 1B7/135, G02B7/00	both national classification	and IPC		
	licant	,			
THO	OMSON LICENSING S.A.				
1.	This opinion contains indication	ons relating to the foll	owing items:	•	
	Box No. I Basis of the op	inion		•	
	Box No. II Priority	•			
			ard to novelty, inventiv	ve step and industrial applicability	
	☐ Box No. IV Lack of unity of invention				
	Box No. V Reasoned state applicability: cit	ement under Rule 43 <i>bis</i> tations and explanations	s.1(a)(i) with regard to s supporting such stat	novelty, inventive step or industrial	
	☐ Box No. VI Certain docum	• •	pp-:g:: 0.00.		
	☐ Box No. VII Certain defects	s in the international app	lication		
	☐ Box No. VIII Certain observ	ations on the internation	nal application		
2.	FURTHER ACTION				
If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.					
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.					
	For further options, see Form PCT/ISA/220.				
3.	For further details, see notes to F	Form PCT/ISA/220.			
Nam	ne and mailing address of the ISA:		Authorized Officer	•	



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Skaropoulos, N

Telephone No. +31 70 340-9454



# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2004/012593

			<u>·</u>	
	Box	No.	I Basis of the opinion	
1.	. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.			
		lang	opinion has been established on the basis of a translation from the original language into the following uage , which is the language of a translation furnished for the purposes of international search ler Rules 12.3 and 23.1(b)).	
2.	. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:			
	a. type of material:			
		⊐ a	sequence listing	
	[	⊐ ta	able(s) related to the sequence listing	
	b. format of material:			
	E	⊐ ir	n written format	
		) ir	computer readable form	
	c. tir	me of	filing/furnishing:	
	C	⊐ c	ontained in the international application as filed.	
		∃ fi	led together with the international application in computer readable form.	
		∃ fı	urnished subsequently to this Authority for the purposes of search.	
3.		has copie	ddition, in the case that more than one version or copy of a sequence listing and/or table relating thereto been filed or furnished, the required statements that the information in the subsequent or additional es is identical to that in the application as filed or does not go beyond the application as filed, as oppriate, were furnished.	
1	٨٨٨	ition o	ni commente:	

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2004/012593

Box No. V Reasoned statement under Rule 43*bls*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No: Claims 1-7

Inventive step (IS)

Yes: Claims

No:

Claims 1-7

Industrial applicability (IA)

Yes: Claims

1-7

No: Claims

2. Citations and explanations

see separate sheet

#### Re Item V.

- 1 Reference is made to the following documents:
  - D1: US 2002/176332 A1 (SAIMI TETSUO ET AL) 28 November 2002 (2002-11-28)
  - D2: EP 1 209 669 A (TOKYO SHIBAURA ELECTRIC CO) 29 May 2002 (2002-05-29)
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  - D4: US 2003/053393 A1 (MAEDA TAKESHI ET AL) 20 March 2003 (2003-03-20)
  - D5: US 6 353 582 B1 (KIKUCHI IKUYA) 5 March 2002 (2002-03-05)
  - D6: US 2003/075669 A1 (TADAKI KYOKO) 24 April 2003 (2003-04-24)

#### 2 INDEPENDENT CLAIMS

- 2.1 The subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document) a method for determining spherical aberration in a light beam (abstract), including the steps of: splitting the light beam into at least two partial light beams (figures 1, 12); focusing the partial light beams onto respective detectors, whereby at least one signal generated by the detectors depends on the positions of the respective partial light beam (paragraphs 131-133, figure 12); and determining the spherical aberration using the signals generated by the detectors (paragraphs 133-138) wherein a hologram is provided for splitting the light beam into the partial light beams (paragraphs 130-139).
- 2.2 For the sake of completeness, it is pointed out that the subject matter of independent claim 1 is also disclosed in documents D2 to D6. See documents D2 to D6, in particular, passages cited in the international search report.
- 2.3 Independent claim 4 specifies a device whose features correspond to those of the method of claim 1. The objections raised with respect to the latter, therefore, also apply, mutandis mutandis, to independent claim 4, which is, thus, not allowable for lack of novelty of its subject matter (Article 33(2) PCT).

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/EP2004/012593

- 3 DEPENDENT CLAIMS
- 3.1 Dependent claims 2, 3, 5, 6, and 7 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty (Article 33(2) PCT). See documents D1 to D6, in particular, passages cited in the international search report.

## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTH	ORITY		RECID 1.2 ALIC 2005
То:		AP	POT 1 2 AUG 2005
see form PCT/ISA/220		WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY	
		(	(PCT Rule 43 <i>bis</i> .1)
		Date of mailing (day/month/year) s	ee form PCT/ISA/210 (second sheet)
Applicant's or agent's file reference see form PCT/ISA/220		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/EP2004/012593	International filing date (conditional filing date (conditional filing date (conditional filing date)	day/month/year)	Priority date (day/month/year) 08.01.2004
International Patent Classification (IPC) or G11B7/135, G02B7/00	both national classification	and IPC	
Applicant THOMSON LICENSING S.A.			
This opinion contains indicat	ione relation to the fell		
	ons relating to the foil	owing items:	
☐ Box No. I Basis of the o	pinlon		
☐ Box No. II Priority	•		
•	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability		
LI Box No. IV Lack of unity of			
Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			o novelty, inventive step or industrial atement
☐ Box No. VI Certain docum	nents cited		
☐ Box No. VII Certain defect	s in the international app	olication	
☐ Box No. VIII Certain obser	vations on the internation	nal application	
2. FURTHER ACTION		,	
If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.			
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For further options, see Form P	CT/ISA/220.		
3. For further details, see notes to	Form PCT/ISA/220.		
·			
Name and mailing address of the ISA:		Authorized Officer	

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Skaropoulos, N

Telephone No. +31 70 340-9454



# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2004/012593

		\
E	3ox N	o. I Basis of the opinion
i. V	Vith rand	egard to the <b>language</b> , this opinion has been established on the basis of the international application in an anguage in which it was filed, unless otherwise indicated under this item.
	la	his opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search under Rules 12.3 and 23.1(b)).
2. V	With reces	egard to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application and sary to the claimed invention, this opinion has been established on the basis of:
а	a. type	e of material:
		a sequence listing
		table(s) related to the sequence listing
b	o. forn	nat of material:
		in written format
		in computer readable form
С	. time	of filling/furnishing:
		contained in the international application as filed.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority for the purposes of search.
<b>3</b> . E	ha Co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as oppropriate, were furnished.
4 4	\dditic	onal comments.

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2004/012593

Box No. V Reasoned statement under Rule 43*bis*.1(a)(l) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No: Claims 1-7

Inventive step (IS)

Yes: Claims

No:

No:

Claims 1-7

Industrial applicability (IA)

Yes: Claims

Claims

1-7

2. Citations and explanations

see separate sheet

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D6: US 2003/075669 A1 (TADAKI KYOKO) 24 April 2003 (2003-04-24)

#### 2 INDEPENDENT CLAIMS

- 2.1 The subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document) a method for determining spherical aberration in a light beam (abstract), including the steps of: splitting the light beam into at least two partial light beams (figures 1, 12); focusing the partial light beams onto respective detectors, whereby at least one signal generated by the detectors depends on the positions of the respective partial light beam (paragraphs 131-133, figure 12); and determining the spherical aberration using the signals generated by the detectors (paragraphs 133-138) wherein a hologram is provided for splitting the light beam into the partial light beams (paragraphs 130-139).
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# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/EP2004/012593

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From the INTERNATIONAL SEARCHING AUTHORITY			_	REC'D 1 2 AUC 2005
То	:		AP	P REC'D 1 2 AUG 2005
			-	WIPO PCT
	and form DCT4C4 DOG		WRI	TTEN OPINION OF THE
	see form PCT/ISA/220		INTERNATIO	DNAL SEARCHING AUTHORITY
				(PCT Rule 43bis.1)
			Date of mailing	
	· · · · · · · · · · · · · · · · · · ·		1	see form PCT/ISA/210 (second sheet)
	olicant's or agent's file reference e form PCT/ISA/220		FOR FURTHER ACTION See paragraph 2 below	
	emational application No. CT/EP2004/012593	International filing date (control of the control o	day/month/year)	Priority date (day/month/year) 08.01.2004
	emational Patent Classification (IPC) or 1B7/135, G02B7/00	both national classification	and IPC	
	olicant			· .
	IOMSON LICENSING S.A.	•		
		· · · · · · · · · · · · · · · · · · ·		
1.	This opinion contains indicat	ions relating to the foll	owing items:	
	Box No. I Basis of the o	pinion		
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	☐ Box No. V Reasoned sta	tement under Rule 43 <i>bis</i> itations and explanations	s.1(a)(i) with regard to s supporting such st	to novelty, inventive step or industrial
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Nar	me and mailing address of the ISA:		Authorized Officer	
	<b>→</b>			not Talana

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Skaropoulos, N

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# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/EP2004/012593

	Box I	No. I Basis of the opinion		
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	a. typ	e of material:		
		a sequence listing		
		table(s) related to the sequence listing		
	b. for	nat of material:		
		in written format		
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	c. tim	e of filing/furnishing:		
	. 🗆	contained in the international application as filed.		
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No:

Claims 1-7

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1-7

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